



Operating Instructions

Translation of original operating instructions

Kerb Stone Handles VZ

VZ-I

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We hereby reserve the right to make changes to the information and illustrations in the operating instructions.

1 EC-Declaration of Conformity / UKCA-Declaration of Conformity

Description: **Kerb Stone Handles VZ**
 Type: **VZ-I**
 Order number: **53100140**

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The machine described above complies with the relevant requirements of the following EU directives:
 The object of the declaration described above is in conformity with the relevant UK-Regulations and UK-Guidelines:

EC-machinery directive 2006/42/EC (Reference: OJ L 157, 09.06.2006)

UK-Regulation: Supply of Machinery (Safety) Regulations 2008 (SI 2008 No. 1597)

The following standards and technical specifications were used:

DIN EN ISO 12100

Safety of machinery - General principles for design - Risk assessment and risk reduction

UK-Regulation: BS EN ISO 12100-1:2003+A1:2009

DIN EN ISO 13857

Safety of machinery - safety distances to prevent hazard zones being reached by upper and lower limbs.

UK-Regulation: BS EN ISO 13857:2019


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Signature, information to the subscriber:

Erdmannhausen, 01.04.2022.....
 (Eric Wilhelm, Managing director)

2 Safety

2.1 Safety symbols



Danger to life!

Identifies imminent hazard. If you do not avoid the hazard, death or severe injury will result.



Hazardous situation!

Identifies a potentially hazardous situation. If you do not avoid the situation, injury or damage to property can result.



Prohibition!

Identifies imminent a prohibition. If you do not avoid the prohibition, death and severe injury, or damage to property will result.



Important information or useful hints for the usage.

2.2 Explanation of basic concepts

Gripping range:	<ul style="list-style-type: none"> specify the minimum and maximum product measurements of the gripping good, which can be gripped with this device.
Gripping good(s):	<ul style="list-style-type: none"> is the product, which will be gripped or transported.
Opening width:	<ul style="list-style-type: none"> consists of the gripping range and the measure to drive over the gripping good. <i>gripping range + measure to drive over the gripping good = opening width</i>
Immersion depth:	<ul style="list-style-type: none"> is the maximum gripping height of gripping goods, conditional of the height of the gripping arms of the device.
Device:	<ul style="list-style-type: none"> is the description for the gripping device.
Product dimensions:	<ul style="list-style-type: none"> Are the dimensions of the gripping good (e.g. length, breadth, height of the product).
Dead weight:	<ul style="list-style-type: none"> is the own weight (without gripping good) of the device.
Carrying capacity/working load limit (WLL*):	<ul style="list-style-type: none"> specify the maximum possible load of the device (for lifting of gripping goods). * = WLL → (english:) <u>W</u>orking <u>L</u>oad <u>L</u>imit
Area in proximity to the ground:	<ul style="list-style-type: none"> the gripping good must be lowered to just above the ground (approx. 0.5 m) immediately after being picked up (e.g. from a pallet or from a truck). For transport, lift the gripping good only as high as necessary (recommendation approx. 0.5 m above the ground).

2.3 Definition skilled worker / specialist




Only skilled workers or specialists are allowed to carry out the installation-, maintenance-, and repair work on this device!

Skilled workers or specialists must have for the following points (if it applies for this device), the necessary professional knowledge.


- for mechanic
- for hydraulics
- for pneumatics
- for electricians

2.4 Safety Marking

PROHIBITION SIGN

Symbol	Meaning	Order-No.	Size
	It is not allowed to stand under hanging loads. Danger to life!	29040210 29040209 29040204	Ø 30 mm Ø 50 mm Ø 80 mm
	The transportation of non-rectangular goods is not allowed!	29040213 29040212 29040211	Ø30 mm Ø50 mm Ø80 mm
	Do not lift any components off-centre (always in centre of gravity).	29040216 29040215 29040214	Ø30 mm Ø50 mm Ø80 mm

WARNING SIGN

Symbol	Meaning	Order-No.	Size
	Danger of squeezing the hands.	29040221 29040220 29040107	30 x 30 mm 50 x 50 mm 80 x 80 mm

REGULATORY SIGN

Symbol	Meaning	Order-No.	Size
	Each operator must have read and understood the operating instructions (and all safety instructions).	29040665	Ø 30 mm
		29040666	Ø 50 mm
		29041049	Ø 80 mm
	The manual guiding of the device is only allowed at the red handles.	29040227	Ø 30 mm
		29040226	Ø 50 mm
		29040225	Ø 80 mm

OPTIONAL

	Be sure that the fork sleeves are mechanically fixed (with locking screw and safety chain or rope) to the lifting device.	29040223	Ø 50 mm
		29040222	Ø 80 mm

2.5 Personal safety requirements



Each operator must have read and understood the operating instructions (and all safety instructions). Only qualified, authorized personal is allowed to operate the device and all devices which are connected (lifting device/carrier).



The **manual guiding** is **only** allowed for devices **with handles**. **Otherwise there is a risk of injury to the hands!**

2.6 Protective equipment

The protective equipment must consist, according to the safety regulations of the following parts:

- Protective clothing
- Safety gloves
- Safety shoes

2.7 Accident prevention



- The workplace has to be covered for unauthorized persons, especially children.
- **Caution at thunderstorm - danger of lightning!**
Depending on the intensity of the thunderstorm, stop working with the device if necessary.



- The workplace must be sufficiently illuminated.
- **Be careful with wet, frozen, iced and dirty building materials! There is a danger of the gripping material slipping out. → DANGER OF ACCIDENT!**

2.8 Function Control

2.8.1 General



- Before every usage of the device check the functions and the working condition.
- Maintenance and lubrication are only permitted when device is shut down!



- Do not use the device, until all faults which can cause safety hazards are removed.
- If there are any cracks, splits or damaged parts on any parts of the device, immediately stop using it.



- The operating instructions must be available at the workplace every time.
- Do not remove the type plate of the machine.
- Unrecognisable information signs (such as regulatory or prohibition signs) must be replaced.

2.9 Safety procedures

2.9.1 General



- The use of the device is only permitted in proximity to the ground. Do not swing it over people heads.
- The stay under lifted load is forbidden. **Danger to Life!**



- The manual guiding of the device is only allowed at the handles.



- While using the device the stay of persons in the working area is forbidden. Except it is indispensable, caused of the way of using the device, e.g. if the device must be leaded by hand.
- Jerky lifting or lowering of the device with or without load is **prohibited**, as well as driving fast with the carrier device/lifting device over uneven terrain! In general, with the load lifted, drive with the lifting equipment (e.g. excavator) **only at walking speed** - avoid unnecessary vibrations.
Danger: Load could fall down or load handling equipment could be damaged!



- Do not lift any components off-centre (always in centre of gravity), because that **could fall down**.
- The device should not be opened if the opening path of the gripping arm is blocked by a resistance (e.g. other concrete blocks or the like)!



- The operator is not allowed to leave the control unit as long as the device loaded with load. The load must always be in the range of vision of the operator.
- Never exceed the carrying capacity/working load limit (WLL) and the nominal width/gripping range of the device.



- Do not pull out stuck or tightened loads with the device.
- **Never** pull or drag loads sideways. Otherwise parts of the device could be damaged. (see Fig. A →)

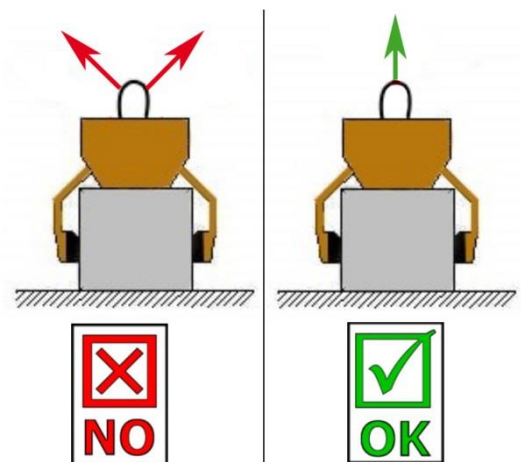


Fig. A

2.9.2 Carrier / Lifting device



- The used carrier/lifting device (e.g. excavator) have to be in good, safe working condition.
- Only authorized and qualified persons are allowed to operate the carrier/lifting device.
- The operator of the carrier/lifting device must have all the necessary qualifications.



- **Never exceed the maximum allowable carrying capacity/working load limit (WLL) of the carrier/lifting device and the lifting gear.**

3 General

3.1 Authorized use

The device (VZ I) is specially designed for gripping and transportation of kerb stones with the corresponding dimensions and is usable with a lifting device or as a TWO-MEN-DEVICE.

Do not exceed the carrying capacity/working load limit (WLL) and the gripping range of the device (see “Technical Data”).

The transportation of non rectangular gripping goods, is not allowed, because they could fall down!



ATTENTION: The use of this device is only permitted in proximity to the ground (→ chapter “Safety at work”).



Only stone elements with parallel and plane surface are allowed to be picked-up and handled.
Because the gripping good could **fall down**.



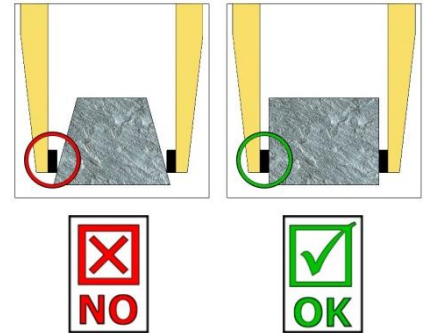
NOT ALLOWED ACTIVITIES:

Unauthorized alterations of the device and the use of any self-made additional equipment could cause danger and are therefore **forbidden!**

Carrying capacities / working load limits(WLL) of the device must not be exceeded and nominal widths/gripping ranges must not be exceeded or fallen below.

All unauthorized transports with the device are **strictly prohibited**:

- Transport of people and animals.
- Gripping and transporting of other loads and materials than described in this operating instruction.
- Never suspend any goods with ropes, chains or similar at the device, except at the designated lifting eyes/-bolts.
- Gripping of gripping goods with packaging foil, because they could fall down.
- Gripping of gripping goods with surfaces that reduce the coefficient of friction (e.g., abrasive, treated, dirty, frozen, coated, painted surfaces), as this causes a reduction in the coefficient of friction between the grippers and the gripping goods → **Danger of slipping!**
Remedy: In case of dirt of any kind, it is absolutely necessary to clean the grippers and the surface of the products in the area of the grippers **before each** gripping process!
- Gripping of gripped goods, which can deform or break due to the clamping force of the gripping device!
- Gripping of goods which show visible damage, or which may break due to their own weight.
- Gripping and transporting of non-rectangular and round gripping goods, because they could fall down (see figure to the right). →
- Transportation of material with “feet”, “bellies” and “blind spacers”.



- The device is only designed for the use specified in this documentation.
- Every other use is not authorized and is forbidden!
- All relevant safety regulations, corresponding legal regulations, especially regulations of the declaration of conformity, and additional local health and safety regulations must be observed.



Prior to every operation the user **must** ensure that:

- The equipment is suited to the intended operation
- the functioning and the working condition of the equipment is examined
- the load is suitable to be handled.

Any doubts about instructions should be raised with the manufacturer prior to use.

3.2 Survey and construction

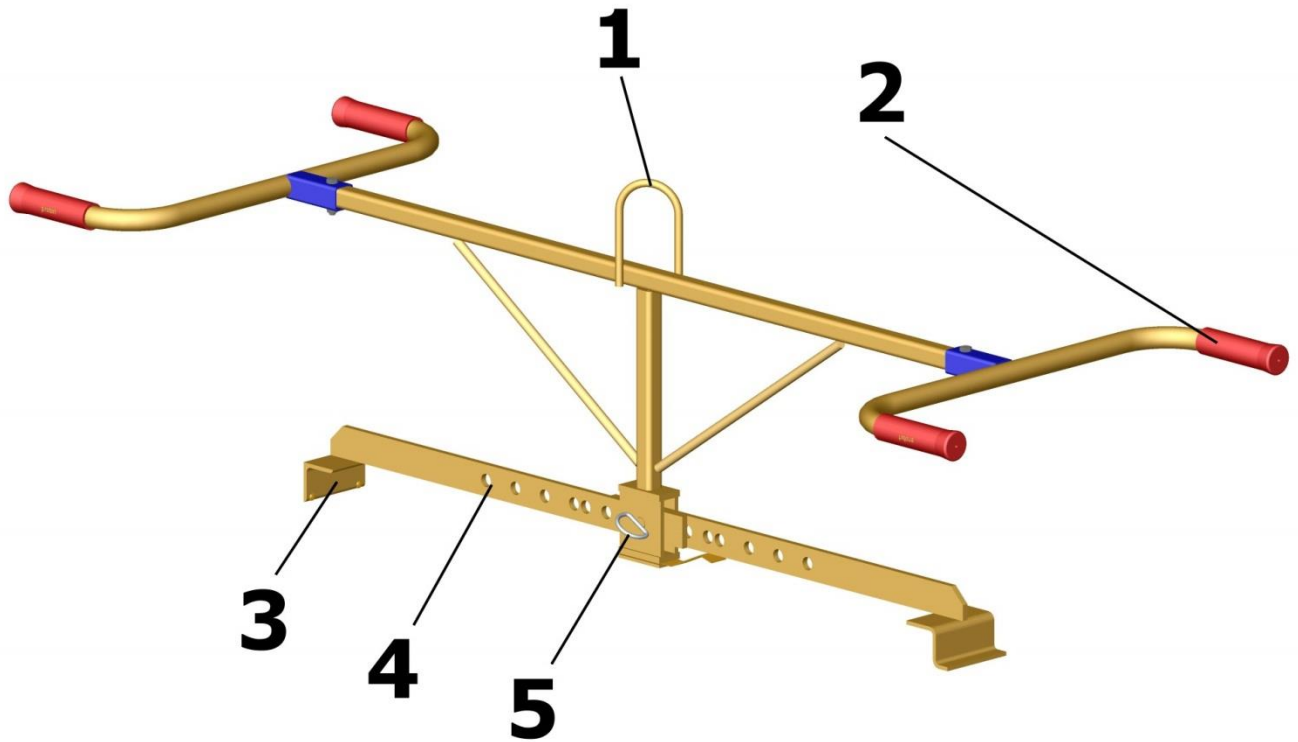


Fig.1

1	Suspension lug for crane hook	4	Gripping arms with gripping range adjustment
2	Handle	5	Socket pin
3	Grippers		

3.3 Technical data

Type	Gripping range W	Inside Height E	Gripper Length L	Carrying capacity/Working Load Limit (WLL)	Deadweight
VZ-I	500 – 1,045 mm (19¾ - 41¼ ")	40 mm (1½")	100 mm (4")	100 kg (220 lbs)	11 kg (25 lbs)

4 Installation

4.1 Mechanical connection

Use only original accessories, in case of doubt consult the manufacturer.



Take care that the **carrying capacity / working load limit (WLL)** of the lifting device/carrier is **not exceeded**, through the load of the device, the optional attaching devices (turning device, fork sleeves, crane boom etc.) and the additional load of the gripping goods!

Gripping devices **always** have to be **gimballed**, so they can swing freely in any position.



In **no case** it is allowed to mount gripping devices with lifting devices/carriers in a **rigid way!**
Break of the suspension may occur within short time. Death, severe injuries and material damage can result!



When using the device on optional attachments (such as fork sleeves, crane boom, etc.), it cannot be excluded, due to the lowest possible construction of the total device (to avoid loss of lifting height), that the device may collide with adjacent components if the device is suspended in an oscillating motion and unfavourable positioning during travel movements of the carrier device. This should be avoided as far as possible by positioning the device appropriately and in a sensible driving style. Damage resulting from this will not be regulated within the scope of the warranty.

4.1.1 Lifting eye / Suspension bolt

The device is equipped with a lifting eye / suspension bolt and can be mounted on various carrier / lifting devices.



Take care that the lifting eye / suspension bolt is safely joined with the lifting tackle (e.g. crane hook, belt) and cannot slide down.

4.1.2 Load hooks and lifting tackle



The device is attached to the carrier/lifting device with a load hook or a suitable lifting tackle.

Ensure that the single chains strands are not twisted or knotted.

Attaching the device to the lifting device/carrier, take care that all local safety regulation is observed.

4.1.3 Fork sleeves (optional)

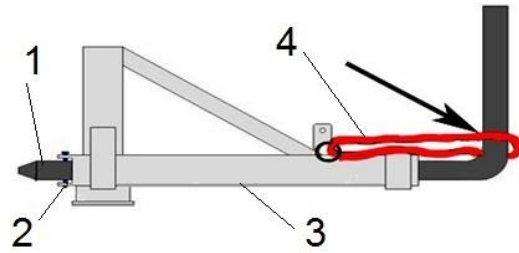
To establish a mechanical connection between the fork lift truck and the fork sleeves you have to put the forks into the fork sleeves and fix it with the locking bolt or with a chain/rope, connected to the eyelet on the fork sleeves and the lift frame.



It is definitely necessary to establish this connection. Otherwise the device could slide from the forks.
DANGER OF ACCIDENTS!



- 1 Fork (of fork lift truck)
- 2 locking bolt
- 3 Fork sleeve
- 4 Chain/rope



4.1.4 Rotators (optional)




When using rotators, a free-wheel throttle valve **must be** installed.

In order to prevent a sudden speedup and stopping the rotational movements, as this may **damage** the device within a short time.

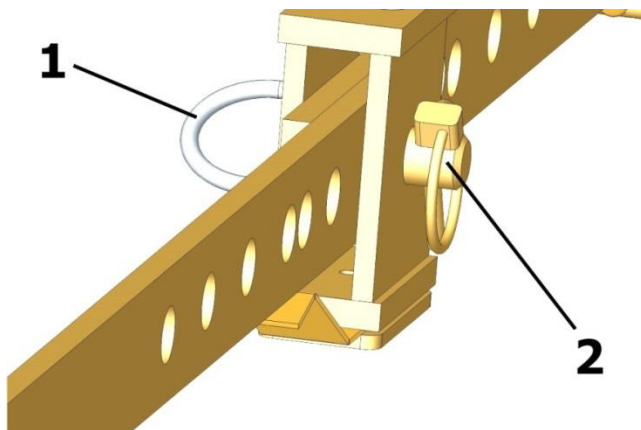
5 Operation

5.1 Adjustment of the gripping range

- The indicated gripping range of the device is adjustable by changing the socket pins.
 - Remove split pin (1) and pull socket pins (2) out.
 - Move gripping arms against each other, until the desired gripping is adjusted.
 - Insert socket pin (2) again and secure it with split pin (1).
- 
 - The adjustment of the gripping range has to follow general **symmetrical**. That means, it must be used in each case the same adjustable hole with both rectangular tubes. Otherwise the device hangs diagonal.



Caution while adjusting of the gripping range. **There is danger of injuring the hands!**
Use safety gloves. →



1	Split pin
2	Socket pin

Fig.2

5.2 Device operation

- Connect the device with the suspension lug to the lifting device and move it to the required position, or use the device as a TWO-MEN-DEVICE
- Lower and position the device slowly on the gripping good (kerb stone).
- When lifting the device the grippers cant with side surface of the gripping good and it can be lifted and transported.
- Avoid quick or jerky movements with the device, as the gripping good could fall down.
- Move the device careful to the destination place and deposit device together with the gripping good on the ground.
- Release the device from the gripping good with the help of the two handles, when lifting the device.

6 Maintenance and care

6.1 Maintenance



To ensure the correct function, safety and service life of the device the following points must be executed in the maintenance interval.

Used **only original spare parts**, otherwise the warranty expires.

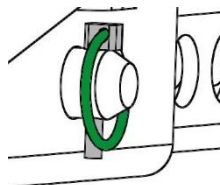


All operations may only be made in closed state of the device!
For all operations you have to make sure, that the device will not close unintended. **Danger of injury!**

6.1.1 Mechanics

MAINTENANCE PERIOD	Work to be carried out
Initial inspection after 25 operating hours	<ul style="list-style-type: none"> Check or retighten all fixing screws (may only be carried out by a qualified person).
Every 50 operating hours	<ul style="list-style-type: none"> Retighten all fixing screws (make sure that the screws are retightened according to the valid tightening torques of the corresponding strength classes). Check all existing safety elements (such as folding pins) for proper function and replace defective safety elements. → 1) Check all joints, guides, pins and sprockets, chains for proper function, readjust or replace if necessary. Check gripper jaws (if present) for wear and clean, replace if necessary. All existing sliding guides, rack gears and joints of moving parts or machine components must be greased / lubricated to reduce wear and for optimum movement sequences (recommended grease: Mobilgrease HXP 462). Lubricate all grease nipples (if present) with grease gun.
At least 1x per year (shorten the inspection interval in case of harsh operating conditions)	<ul style="list-style-type: none"> Inspection of all suspension parts, as well as bolts and brackets. Inspection for cracks, wear, corrosion and functional safety by an expert.

1)



6.2 Trouble shooting

ERROR	CAUSE	REPAIR
The clamping-power is not big enough, the load is slipping out		
(optional)	<ul style="list-style-type: none"> The grippers are worn 	<ul style="list-style-type: none"> Replace the grippers
(optional)	<ul style="list-style-type: none"> The maximum load is exceed 	<ul style="list-style-type: none"> Reduce the weight of. the load
Adjustment of the gripping range (optional)	<ul style="list-style-type: none"> The actual opening width is not correct 	<ul style="list-style-type: none"> Adjust the gripping range according to the load you want to transport
Property of material	<ul style="list-style-type: none"> The surface of the material is dirty or the material is not suitable / allowed for this device. 	<ul style="list-style-type: none"> Check the surface of the material or ask the manufacturer, if you the material is allowed for this device.
Unbalanced load		
	<ul style="list-style-type: none"> The device is not loaded symmetrically 	<ul style="list-style-type: none"> Adjust the position of the load
Adjustment of the gripping range (optional)	<ul style="list-style-type: none"> The adjustment of the gripping range is not symmetrical. 	<ul style="list-style-type: none"> Correct the adjustment of the gripping range

6.3 Repairs



Only persons with the appropriate knowledge and ability are allowed to repair the device. Before the device is used again, it has to be checked by an expert.

6.4 Safety procedures

- It is the contractor’s responsibility to ensure that the device is checked by an expert in periods of max. 1 year and all recognized errors are removed (→ DGUV norm 100-500).
- The corresponding legal regulations and the regulations of the declaration of conformity must be observed!
- The expert inspection can also be done by the manufacturer Probst GmbH. Contact us at: service@probst-handling.de
- We recommend affixing the inspection sticker „Sachkundigenprüfung / Expert inspection“ in a clearly visible place (order no.: 2904.0056+Tüv sticker with year number) after the inspection has been done.



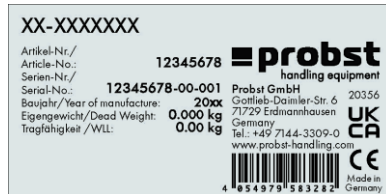
The check by an expert must be proved!

Device	Year	Date	Expert	Company

6.5 Hints to the type plate



- Type, serial-number and production year are very important for the identification of your device. If you need information to spare-parts, warranty or other specific details please refer to this information's.
- The maximum carrying capacity/working load limit (WLL) is the maximum load which can be handled with the device. Do not exceed this carrying capacity/working load limit (WLL).
- If you use the device in combination with other lifting equipment (Crane, chain hoist, forklift truck, excavator) consider the deadweight of the device.



Example:

6.6 Hints to the renting/leasing of PROBST devices



With every renting/leasing of PROBST devices the original operating instructions must be included unconditionally (in deviation of the user's country's language, the respective translations of the original operating instructions must be delivered additionally)!

7 Disposal / recycling of devices and machines



The product **may only** be taken out of service and prepared for disposal / recycling by qualified personnel. Correspondingly existing **single components** (such as metals, plastics, liquids, batteries/rechargeable batteries etc.) **must** be disposed of/recycled in accordance with the nationally/country-specific applicable laws and **disposal regulations!**



The product must not be disposed of in household waste!

